DOCUMENT RESUME

ED 322 699 EC 231 891

AUTHOR Foster, Susan; DeCaro, Patricia Mudgett

TITLE Mainstreaming Hearing-Impaired Students within a

Postsecondary Educational Setting: An Ecological

Model of Social Interaction.

INSTITUTION National Technical Inst. for the Deaf, Rochester, N.

Y.

SPONS AGENCY Department of Education, Washington, DC.

PUB DATE 18 Apr 90

NOTE 37p.; Paper presented at the Annual Conference of the

American Educational Research Association (Boston,

MA, April 16-20, 1990).

PUB TYPE Speeches/Conference Papers (150) -- Reports -

Research/Technical (143)

EDRS PRICE MF01/PC02 Plus Postage.

DESCRIPTORS College Housing; College Students; *Dormitories;

*Ecological Factors; Environmental Influences;

*Hearing Impairments; Higher Education; *Interaction

Process Analysis; Interpersonal Competence;

Mainstreaming; Models; *Peer Relationship; Social Behavior; Social Differences; Social Environment; *Social Integration; Social Life; Student Attitudes;

Student Characteristics

IDENTIFIERS Attitudes (toward Disabled)

ABSTRACT

Findings are presented from a study of social interactions between hearing-impaired and hearing college students living on one floor of a mainstreamed residence hall at the Rochester (New York) Institute of Technology, home of the National Technical Institute for the Deaf. Twelve ethnographic observations were completel, and interviews were conducted with 20 residents. An ecological model is offered for describing and explaining social interactions. Four individual characteristics emerged as significant in explaining the interactions: reasons for selecting a mainstream floor and perceived advantages of living on a mainstream floor; communication skill; knowledge of one another; and feelings and attitudes toward hearing-impaired/hearing people. Environmental characteristics are also considered, including the physical setting, policies and rules related to student housing, stability of the environment, and campus culture and organization. The paper concludes with a discussion of how such a model can be used to study and explain interaction between he ing-impaired and hearing people within other contexts, including family, elementary and secondary school, and work. (JDD)

* from the original document.

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality
- Poir is of view or opinions stated in this document do not necessarily represent official OERI position or policy

Mainstreaming Hearing-Impaired Students Within a Postsecondary Educational Setting:

An Ecological Model of Social Interaction

Susan Foster

and

Patricia Mudgett DeCaro

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Paper presented at the Annual Meeting of the American Educational Research Association in Boston, MA, April 18, 1990.

The research reported in this document was produced at the National Technical Institute for the Deaf in the course of an agreement between the Rochester Institute of Technology and the US Office of Education.

ERIC

B

Introduction

One of the most pressing issues raised in discussions of the advantages and disadvantages of mainstreaming hearing-impaired students within educational settings is that of social interaction. More specifically, questions have been asked about the degree and quality of social interaction between mainstreamed hearing-impaired students and their normally hearing peers. Much of the research in this area suggests that hearing-impaired students are sometimes socially isolated in mainstream educational settings (Farrugia and Austin, 1980; Foster, 1989, 1988; Garreston, 1987; Mertens and Kluwin, 1986).

Within postsecondary educational settings, students have many opportunities for social interaction through participation in social and academic clubs, fraternal organizations, sports and other campus events. Additionally, students spend a lot of time in physical proximity in residence halls and related facilities; interactions in these settings are more likely to be spontaneous and unstructured.

At Rochester Institute of Technology (RIT), large numbers of hearing-impaired and hearing students live and study together on one campus. One of the goals at RIT is the promotion of interaction between hearing-impaired and hearing students. As part of this effort, some hearing-impaired and hearing students are assigned to the same residence hall floors, often described as "mainstream" floors. These placements are made in the belief that, by placing hearing-impaired and hearing students in close proximity within an informal setting, the frequency and quality of their interactions can be enhanced. Resident Advisors (RAs) for mainstream floors are specially selected and trained in methods of facilitating interaction, and staff from the NTID Department of Human Development and RIT Department of Residence Life maintain close contact with these RAs throughout the year to monitor floor activities and assist with problems.



Rochester Institute of Technology is the home of the National Technical Institute for the Deaf (NTID) which has an enrollment of approximately 1200 deaf students.

However, even with this level of support, enhanced social interaction between hearing-impaired and hearing students is not always achieved within the residence halls. As a result, a study was on one mainstream residence hall floor in an effort to learn more about interactions between students in these settings. The design of the project was guided by several questions. For example, what are the perspectives of hearing-impaired and hearing students towards living together on a mainstream floor? Does the quantity and quality of interaction change over time? What conditions foster (or inhibit) friendships between hearing-impaired and hearing residents?

In this paper major findings from the study are presented and discussed. In particular, an ecological model is offered for describing and explaining social interaction between hearing-impaired and hearing students within the mainstream residence hall. The paper is concluded with a discussion of how such a model can be used to study and explain interaction between hearing-impaired and hearing people within other contexts, including family, elementary and secondary school, and work.

Data Collection and Analysis

During the fall of 1988, a floor in Jackson Hall² was selected for study. Factors considered in selecting the floor included the ratio of hearing-impaired to hearing students on the floor³, and the degree to which the floor could be considered "typical" (that is, not unusually interactive or non-interactive). Contact was initiated with the two RAs from the floor, and a letter developed with them which could be sent to all floor residents, in which the purpose and activities of the study were described. Following dissemination of this letter, the researchers attended a floor meeting where they were introduced by one of the RAs and given a second opportunity to explain the project and respond to questions.

Between January and June, 1989, data were collected on the floor using ethnographic field methods, including participant observation and indepth interviewing (Bogdan and Taylor, 1975;

All names of people and places are pseudonyms.

Most of the meinstreamed residence hall floors at RIT are either predominantly hearing-impaired or hearing. The floor selected, while clearly not balanced, was less weighted than others considered.

Spradley, 1979). The primary goal of data collection was to learn about the experience of living on a mainstream floor from the perspective of floor residents. Secondary goals included learning students' perpsectives on the larger experience of mainstreaming on the RIT campus. A total of 12 observations were completed as well as interviews with 20 residents of the floor. Since student activity in the residence halls is highest during the evening, observations were generally conducted between 7 p.m. and midnight. These visits generally lasted between 30 and 90 minutes, and included observations of the physical setting as well as casual conversatiosn with students and observations of their behaviors. Upon leaving the setting, detailed field notes were recorded Interviews were scheduled with students at their convenience and were conducted in their rooms or the researchers' offices. In total, 20 students who lived on the floor were interviewed, including 10 hearing-impaired males, 1 hearing-impaired female, 5 hearing males and 4 hearing females. Topics included questions about general perceptions of life on a mainstream residence hall as well as more specific questions about social interactions on the hall, the development of friendships, and communication between students. The interview was concluded with questions about more general experiences on the RIT campus and suggestions for improving the extent and quality of interaction between hearing and hearing-impaired students, both within the residence halls and in other campus settings. Interviews were recorded and transcribed verbatim4.

Information was also collected about interaction on other floors and in other residence halls through casual conversations with students who visited the floor under study; additionally, an indepth interview was done with one student from another floor who visited the floor regularly.

All hearing students voiced for themselves. Procedures for recording interviews with hearing-impaired students were more varied and complex. Several hearing-impaired students had speech which was clear enough to record on audio tape (any transcriber could easily understand what they said). Others could be recorded but only the researcher who conducted the interview could understand the recording; in these cases the researcher would voice over the interview so that it could be sent for transcription. Lastly, a few hearing-impaired students preferred not to use their voice at all, or had speech which could not be understood on audio tape; their comments were interpreted and voiced for the recording by (1) a third party interpreter, or (2) one of the researchers, who is also an interpreter, both of whom hold the Comprehensive Skills Certification from the Registry of Interpreters for the Deaf.

his information was useful for comparison of the floor under study with other campus residential environments, as well as adding to the more general base of data on campus life.

Recorded field notes and interview transcripts provided the data base for analysis. Code categories were developed (a process of sorting the data for further analysis). Examples of code categories used in this study include descriptions of the physical environment, communication strategies, and suggestions for improving interactions. Data within code categories were then analyzed for recurring patterns and themes (Bodgan and Biklen, 1983).

Description of Jackson Hall and the Floor Selected for Study

• The residence hall, affectionately referred to by one student as "Hotel Jackson," is a twelve story structure. Entry to the building is from the first floor (street level) or the basement (via an underground system of tunnels connecting the residence halls with related facilities such as laundry, game room, eating places and a convenience store). There is a lounge on the first floor, as well as staff offices, student mail folders, a 24 hour information and service desk, and soda/snack machines.

The floor selected for study consists of two identical hallways which meet at the center of the building at the elevators. Prooms are arranged in suites for six students (8), triples (2) and singles (2). While the floor is designed to house 56 students, only 50 were living on the floor at the time of the study; of these, 27 are hearing-impaired males, 6 are hearing-impaired females, 9 are hearing males and 8 are hearing females. The configuration of rooms and distribution of students by room are indicated on Diagram 1. Hearing status is indicated as hearing (H) or hearing-impaired (HI); gender is indicated as female (F) or male (M). The symbol "0" indicates a vacant space in a room. Students interviewed are identified by two asterisks (**). Students the researchers met but were unable to interview in depth are indicated by a single asterisk (*).

Most students live in a suite, which consists of three bedrooms (each of which houses an average of two students) joined by a small entry way and a shared bathroom (see *Diagram 2*). In order to enter two of the three bedrooms within a suite, one must first go into the suite entry way; from this point, there are individual doors leading to the two inner bedrooms. The shared bathroom



opens onto this entry way on one side, and the third bedroom on the other. Access to the third bedroom is through the entry way and bathroom, or directly from the outer hall.

The heavy bedroom doors (including those which open onto the suite entry ways and those which open directly onto the hallway) swing closed unless they are propped open. The outer door which leads into the suite entry way does not close automatically, but by leaving it open students are giving passersby access to the suite bathroom. As a result, a visitor to the floor is likely to encounter hallways lined on either side by closed doors or doors leading to more doors (which are also usually closed).

There is an RIT cable outlet for television in each bedroom, as well as strobe lights which indicate that someone has rung the doorbell. Bedrooms are also equipped with flashing fire alarms. Furniture is of a style that permits "stacking" and as a result students often arrange their rooms in unusual and space-saving configurations. While bedrooms varied widely in terms of cleanliness, neatness, and style, every room was full of individual tokens and bore the personality, or stamp of the people who lived there. In short, the bedrooms looked very "lived in," in contrast to the hallways and public areas on the floor, which were stark, empty and insititutional.

There is one television lounge on each hallway which students can enter via a door off the hallway. The television is suspended from the wall and is fairly high off the ground (one researcher who is 5'6" tall had trouble reaching the top knob to adjust channels; the other researcher who is shorter could not reach the controls without standing on furniture). There are two sofas in each lounge, and sometimes a table or additional chair or bench. An institutional size garbage pail is in each lounge, as well as a sink, cupboard, stove top and microwave oven. There are RIT cable outlets for the televisions in the lounges, but the cable is often missing.

Hallways are dimly lit and were usually empty during observations, with the exception of a late night visit to the floor, when there was a fair amount of activity. At other times students who were observed in the hallways generally seemed to be coming and going, although they did necessarily congregate in the elevator area. The study lounge (located opposite the elevators) is



usually locked and empty (every student has a key for the study lounge on his or her floor); the curtains were missing, and the furniture was sparse and often broken.

Findings

Interactions between hearing-impaired and hearing students within the residence halls are influenced by characteristics of the individual and characteristics of the environment.

Individual Characteristics

Students who live on mainstream floors bring with them a host of attitudes, skills, beliefs, assumptions and expectations. Whenever they come into contact with another person, they interpret and analyze their experience in light of these highly individual characteristics. Four individual characteristics emerged as significant in explaining interaction between hearing-impaired and hearing students: these are (1) reasons for selecting and advantages of living on a mainstream floor, (2) communication skill, (3) knowledge of one another, and (4) feelings and attitudes towards hearing-impaired/hearing people.

Perceived advantages of living on a mainstream floor. Students were asked whether they feit there were advantages to living on a mainstream floor. There were clear differences in the patterns of response according to whether the person was hearing or hearing-impaired. Hearing students were more likely to focus on the special features of the building in explaining why they chose or prefer to live in Jackson. Specific positive features of Jackson noted by students include semi-private bathrooms, air conditioning, better furniture, larger rooms, better cleaning service, cable hook-up for television, and the 24 hour desk in the lobby. While some students did mention opportunities to learn about hearing-impairment and interact with hearing-impaired people, this was generally secondary to being in one of the best residence hall buildings on campus. In the following quotation, a woman weighs the advantages of being in a more modern and well equipped building against the mainstream experience:

I plan on living here next year, and however long I live in the dorms I would live in this area. But we [my friends and I] were talking about whether or not, if the other dorms had the same advantages as this dorm does, like say if they all had the suite bathrooms instead of like the other dorms have the floor bathrooms, if they all had the bigger

rooms, if they all had the nicer, cleaner area, would I stay here, or would I move to the other ones. You know, we were all talking about that, and its a tough question. I'm not sure... sometimes I think I would move to the other ones. But it would depend, because all my friends are here too, but it's a tough question to think about—if I'm just here because of the advantages or if I want to be here because of the experience of mainstreaming.

Hearing-impaired students were much less likely to mention the physical characteristics of Jackson when describing why they liked living there, focusing instead on the opportunity to learn how to interact with hearing people:

I think it's not necessary but its good [mainstreaming in dorms]. That way the deaf are pulled out of the closet, not so shy and learn how [to interact with hearing]. Deaf and hard of hearing, we're a minority you know. That's the way it is, you can't do anything about that. After they leave RIT... there will be communication barriers. They have to know [how to interact with hearing people].

Several also noted that they had come from mainstream programs prior to entry at RIT, and as a result were as [or even more] comfortable with hearing people than with hearing-impaired. One person said she felt safer having hearing people around, "because they can help you if there is a rape or something." A few noted that the learning experience was reciprocal. As one person put it, "I don't believe in an all deaf floor--I think hearing and deaf people should... learn about each other."

Common to many of the remarks of both hearing and hearing-impaired students is the theme of utilitarianism; that is, they associated with one another for reasons other than the simple pleasure of one another's company. Living on the mainstream floor for reasons of practicality rather than personal preference was especially prominent in discussions by hearing-impaired students, as illustrated in the following quotation:

Here [on the mainstream floor] its hell, but the real world really is hell too, because there's no place in the real world you can be... completely deaf community. No matter where you go there's always going to be a hearing person there. And you're gonna have to try and communicate with a hearing person there. So that's what I think the best thing on the mainstream floor is, but I would prefer a deaf floor cause it's like heaven, life goes easy for us [there].

In short, hearing and hearing-impaired students sometimes live on a mainstream floor for reasons that have little to do with the goals of building friendships. Hearing students often sign up



for Jackson simply because it is one of the nicest buildings on campus. Hearing-impaired students see a need to learn how to get along with hearing people. Neither rationale is ideal for developing a strongly integrated and interactive living community.

Communication. Many students said that communication is critical to interaction in the residence halls; if two individuals are not able to communicate, then a communication barrier exists between them. Several students said that an inability to communicate is the *only* barrier to interaction.

Students spoke of many types of communication. Direct modes of communicating one on one include speech and lipreading, signing using either ASL or signed English, fingerspelling, writing, and gesturing. Eye contact, touch, and facial expression were frequently said to be very important by hearing-impaired students. Some students suggested the use of an interpreter (either a trained one or anybody who knew a few igns). For communicating across distance students used phone, with voice only or special devices (amplifiers or telecommunication devices for the deaf--TDD's). Signs posted in hallways or on doors represented a more public method of communicating with all members of a floor.

A mere listing however, does not explain how these modes are manipulated and combined by students for optimum communication. Clearly some students had a greater repertoire of methods available to them. For example, consider Jack. A hearing-impaired student who does not use his voice and communicates primarily in ASL, Jack was nonetheless able to combine his skills with those of others to carry on routine conversations with those around him on the floor. He spoke of writing and gesturing to hearing and oral hearing-impaired students who could not sign. With those who knew some sign language, he built on their limited skill, switching to Signed English if this was helpful. An oral hearing-impaired friend said he could lipread Jack even though Jack produced no sound. Jack is an example of a highly skilled and flexible communicator.

However. students also described constraints, or limitations to this sort of combination of methods. For example, because so few interactions involve mutual fluency in one mode and



language, speech and sign have to slow down to accommodate both the senders and the receivers.

While there was much appreciation of those who were willing to take the time to make the necessary accommodations, there was also recognition that no one really enjoyed going so slowly:

A lot of hearing impaired people who are profoundly deaf they don't like to slow down [signing], you know. It feels like a bother to them. Just like I suppose it does to the hearing people to speak up...

In particular, writing was heavily criticized as being useless for anything other than dealing with everyday issues or simple requests and statements. One reason is that it does not allow for a natural pace, or give and take, between partners. Almost everyone agreed that writing is inappropriate for the lengthy conversations or emotional discussions which occur between friends:

, I don't know if both sides would want to put up with that kind of effort [to write back and forth]...the hearing students think, you know, "I have to write, that's not the way I'm used to [communicating] when I'm standing here right next to a person." And the deaf person is thinking "This is the only way I can communicate with this person because he's not willing to meet me half way," ...I don't think the writing really works. Not in this close of an interaction.

Another constraint on communication is associated with uncertainty about someone's hearing status and what kind of communication is required. Students frequently spoke of being surprised or shocked to find that someone was hearing-impaired, or of not knowing:

At first... I didn't even know that Jackson was for the deaf people... and when I first moved in I said "Excuse me" to someone. I mean, I didn't see hearing aids or anything, and they just stood there, and I don't know if they happened to see me or something, but they finally moved, and I was like, "God, how rude."

Further, there is the uncertainty of the individual's communication skills as well as their attitude toward a particular communication mode. For example, some oral students object to signing, while others don't use signs expressively but seem to benefit receptively from their supplemental use. As a result, students look for clues about hearing status and preferred communication mode(s). Hearing students look for hearing aids and signing, or listen to voice quality. Hearing-impaired students look for quality of signs and note people who appear to be new at signing.

Time was an important factor in communication between hearing-impaired and hearing students.

For example, several students said that it takes time for deaf and hearing students to get used to



different communication styles and achieve a level of understanding. Others mentioned the advantage of familiarity in communication; they said that knowing someone— even a little—helps because you have become used to their particular communication pattern, and there is not the uncertainty of what sort of communication will work. An example:

I was worried about communicating with him [deaf RA], because he's not one of the more vocal people and I didn't know any sign language... but after like a month, I guess I must have got used to his voice, and I really have never had any problems with it.

In summary, fluent communication between hearing and hearing-impaired students is rare. As a result, students patch together a communication "quilt" of strategies and skills and adapt them to the situation at hand. Not surprisingly, they often spoke of being able to communicate "well enough" to carry out routine tasks or meet personal goals for interaction. At the same time, the attempt to communicate draws people together. Students said that communication improves with time, and spoke with warmth and respect for others who have made ongoing, serious attempts to become better communicators. What matters to many is not just a person's ability to communicate, but their persistence and willingness to do so.

Knowledge of one another. Students' behavior towards each other is based in part on the quality and quantity of knowledge which they have of each other. Expectations, beliefs, facts and myths combine to produce a posture, or perspective which individuals bring to any given situation. Students arrive at RIT with beliefs and expectations about hearing-impaired and hearing people. They also learn about one another through their college experience.

Before they arrive on campus, many students have formed concepts of "hearing-impaired" and "hearing" from their past experiences. While hearing students certainly have theories about deafness, these ideas are seldom based upon direct knowledge of or experience with hearing-impaired people. In fact, a number of hearing students had no prior experience related to deafness. Many were shocked at finding so many hearing-impaired people at RIT and uncertain about how to interact:



I arrived here, I didn't even know there were deaf students on this campus...got my room key and went into [Jackson] and there were all these deaf people. I was like, "Am I in the right place?"

Still, approximately half the hearing students said they did know something about deafness prior to arrival at college. In some cases this knowledge was gained through indirect and/or public sources, such as newspapers and movies. Others attributed their knowledge to personal contact with a person who is hearing-impaired or knowledgeable about deafness, including a hearing-impaired schoolmate, an aunt who taught signs, an older person going deaf, and a hearing-impaired neighborhood playmate. Sometimes students drew on experiences which they perceived as related to deafness, as in the following example:

Anything can be overcome. I know, like two-thirds of my relatives speak Canadian French, that's it....when you both want to find out what you're saying, it's real quick to understand.

Hearing-impaired students, on the other hand, have been around hearing people to varying degrees all their lives. Most indicated that they are quite "used to" the hearing world. Exactly what hearing-impaired students have learned varies considerably and is both positive and negative. Some mentioned having been mocked by hearing people or being stared at in public, and described communication problems, even with parents. Yet others spoke fondly of school experiences and close relationships with hearing parents and siblings. Several hearing-impaired students who had been mainstreamed or consider themselves "hard of hearing" indicated a lack of prior experience with other hearing-impaired people; for them, the hearing world was all they had known.

Once students arrive on campus they see one another every day and have a variety of opportunities to learn about each other. Students spoke of learning through official, organized means such as RIT publications and programs; for example, mainstreaming is explained in housing brochures and floor programs are planned for residents of mainstreamed residence halls. However, most learning occurs through informal means, including general observation and interaction with others. Students talked at length about what they learned from observing each other within the dormitories and related facilities. For example, a hearing student made the observation that "when deaf students eat, they like to have a round table so everybody can see each other." A hearing-



impaired student said his experience on a mainstream floor caused him to revise his opinion of hearing people:

I thought they [hearing people] were real assholes back then [in high school], but after I met... three hearing guys down there [on another mainstream floor], which I used to be real good friends with, after I met them they showed me that hearing people actually care. They don't pick on people.

Students observed each other at parties, which are often held in rooms within the dorms. One hearing-impaired student pointed out that hearing people at parties prefer to watch television while hearing-impaired students prefer to play games. Several hearing students said that hearing-impaired students were often "wild" at parties. Both hearing-impaired and hearing observed that students tended to have separate parties or form subgroups at parties based on communication preferences.

In addition to general observations, students routinely identified specific people from whom they learned (directly or indirectly) about deaf and hearing issues on campus. These people, who can best be described as "role models," include peers and those in authority. Peers include roommates, classmates and friends. Authorities include RIT faculty and staff as well as students who are more experienced. in positions of power (upperclassmen, RAs, student leaders); almost all are hearing people, most of whom know little about deafness.

Hearing students in particular learned a great deal from role models regarding issues related to communication with hearing-impaired people. Specifically, they learned that some hearing people know sign language, while others do not. For example, with the exception of the college of NTID, most RIT faculty and staff do not know sign language. As a result, students observed many hearing adults who do not sign to hearing-impaired students and several mentioned the ensuing struggle and frustration that occurs in classes, offices and eating places across campus. Additionally, there was mention of hearing students on the floor who sign, including an interpreting student and a person who learned sign because he was "going crazy" not knowing what the hearing-impaired students around him were talking about. RAs are supposed to know sign language, but in fact many are not good signers. As the following quotations illustrate, the sign fluency of the RA sets a powerful example for students on the floor:

My RA friends all have to know sign language, so I learn a lot from them, pick up things from them.

[When]... the RAs are involved in a kind of a struggle for communication... all those hearing people at meetings on the floor are seeing this, so it's not only the people in the conversation that can get frustrated and afraid, but people who see these conversations. [Emphasis added.]

Most of the hearing students had little contact with hearing-impaired role models other than peers who lived on their floor. However, those who did expressed great respect and enthusiasm for these people and what they learned from them. For example, a few students had taken sign language classes from hearing-impaired people and spoke very highly of both faculty and student teachers. One student spoke about his RA from last year as someone who created an excellent mainstream floor experience:

[Last year] my RA was deaf, and he... did a wonderful job. He really promoted everybody being together, set up all kinds of programs that we could all enjoy... like ski trips... anybody can go skiing, and we all did, hearing and deaf... I'll never forget that, that was fun. We had awards for everybody on the floor... like, most likely to such and such... most likely to go off and marry a race car driver or something like that. But it was just little things like that [which] kept our floor a community.

In the following quotation, a woman speaks glowingly of a hearing-impaired faculty person with whom she had become friends:

If there's any one person who's made a biggest impression on me, it's [deaf faculty person, and it's] not because she's deaf... She was the first person I met, who just happened to be deaf, who I really looked up to... I mean she was like, this is what deaf people can do, you know.

Regardless of how they learned about one another or the quantity or quality of their knowledge, most students felt that they understood and could explain the people around them after only a few months on campus. Implicit in their comments are a sense of "knowing" about each other and a feeling of familiarity, reflected in the comments of both hearing and hearing-impaired students to the effect that it "does not bother" them to be around the other.

Attitude and feelings about hearing or hearing-impaired people. Students' feelings and attitudes towards one another can be loosely categorized as unpleasant, neutral, or positive. The majority of the comments fall into the first two categories, an indication that the situation is not easy for many. However, the overall negative and neutral impression conveyed by these comments is

mitigated by the fact that they were often made within the context of initial feelings, feelings attributed to others (particularly those who have not lived on a mainstream floor), or feelings that arise in specific contexts.

Fear, ranging from nervousness to paranoia, was mentioned by most students and primarily attributed to hearing people. The most significant explanation given was that "they [hearing] don't know," meaning either a general fear of what is new and unpredictable, or a lack of specific knowledge about what to do or how to handle a situation. As one student observed, hearing students "have a hard time living here [on mainstream floor], all paranoid and nervous because they don't know the culture and they don't know how to communicate." Another example:

I just went up to someone, the first person I saw in the hallway and I asked them [a question] and they must of, they were hearing impaired, they couldn't hear me, but they were answering back... and I realized that I was talking to them. And it almost made me nervous, because I didn't really know, you know, their voice is different... just everything was different, and it was hard to get used to.

In the following quotation, a hearing-impaired student draws parallels between the fear experienced by hearing students and those experienced by hearing-impaired people:

Some hearing people are afraid to sign. They just cannot sign... they're afraid if they sign to a deaf person they're gonna laugh at you for making the wrong sign. That's why a deaf person is afraid to talk, cause they're gonna laugh at you for making a wrong sound, for a word, the wrong pronunciation. It's just a fear of a new language, that's what it is.

Anger and frustration resulting from communications difficulties and "rude" behavior were cited by both hearing and hearing impaired. For example, hearing students cited frustration over slowness in lines due to communication difficulties with hearing-impaired students in offices, noise in the dorm, and hearing-impaired people's "ignorance" in getting along with hearing people. Hearing-impaired students cited hearing snobbery, as reflected in a refusal to be friendly or to try to communicate, as well as specific instances in which hearing students mock the signs, speech or writing of hearing-impaired students. Nonetheless, all agreed that the most severe hostility is expressed by hearing students living in dorms which are not mainstreamed.

Both hearing and hearing-impaired students said they avoid the other in response to these feelings. However, there was also a tone of passive acceptance in the comments of hearing-impaired students; only one person said he was angry when hearing students insulted hearing-impaired students or refused to communicate, calling other hearing-impaired students "wimps" for not being assertive in these situations; most said they just "ignore it," or "forget it."

Embarrassment and discomfort were attributed to both hearing and hearing-impaired students, although causes were seen as different. Hearing-impaired people were said to be embarrassed by possible bodily noises and odd vocalizations, while hearing people were seen as embarrassed by communication failures, their own hearing status, and awkwardness in handling interactions. For everybody, comfort was simply being with those you know or are similar to. Many students said that hearing feel more comfortable with hearing, and hearing-impaired with hearing-impaired.

Despite the obvious difficulties cited above, over half of the students, both hearing-impaired and hearing, expressed the feeling that everything was really "OK" or "fine" on the floor. Students often spoke of "having no problem [with hearing-impaired students]," or "they [hearing] don't bother me, fine." There was a general sense that hearing-impaired and hearing could live side by side without much difficulty, but as one student said, "We don't socialize, [we] just say hi."

To go beyond this level, almost everyone emphasized the need for interest, motivation and effort. Many students stated that some people are simply not willing to put forth the effort required for a deeper relationship with each other. One student put it as follows:

A lot of times people, deaf and hearing alike, don't want to bother dealing with other people. They have enough friends in their own culture that they don't need to go after more friends elsewhere. It's very easy [for hearing people] not to bother with deaf people, and it's very easy [for deaf people] not to bother with hearing people.

Students mentioned the difficulties which sometimes arise at mixed parties where people go to have a good time and drink and don't want to be "inconvenienced" by having to concentrate on communication. Students were seen as needing to be open-minded and outgoing to overcome the barriers to interaction. Moreover, as the student quoted below points out, interaction is always a two-way street:



It has to be on both sides. Why should one person give the full commitment and the other person doesn't give a commitment at all. It's like a relationship... it takes fifty-fifty.

Hearing-impaired students in particular emphasized the respect awarded hearing students who learn to sign or show interest in deaf culture. Motivation to interact was derived from a variety of sources, including positive reinforcement from both hearing-impaired and hearing, interest in each other's lives, and a need or drive to understand what was going on.

Lastly, several students expressed real enjoyment at being on the mainstream floor. The hearing-impaired students liked it because some of the hearing students learned signs and dated deaf girls, which they felt showed respect for hearing-impaired people, language and culture. The hearing students expressed their enthusiasm in more general terms, calling it a "wonderful experience". Environmental Characteristics

Student interaction is also affected by factors which are external to the individual. RIT and the residence halls provide an environment, or context, within which students meet, learn and set about getting to know or avoid each other. In this section, four characteristics of the RITenvironment are examined: these are (1) the physical setting, (2) policies and rules related to student housing, (3) stability of the residential environment, and (4) campus culture and organization.

The physical setting. As Sarason (1972) points out, the creation of settings is essentially a social endeavor; planning for physical structures need not be part of the creation of settings.

However, once it is in place, the physical structure will inform the interactions of those who live and work within it. Analysis of the field note and interview data suggest that the physical layout and appointments of Jackson Hall do not encourage interaction between students. In fact, the building has more of the characteristics of a hotel or apartment complex than a residence hall, in that units offer students a high degree of privacy, insulation, and self-sufficiency. For example, students in other residence halls must share a bathroom (there is one for men and one for women on each hallway). Students in "Hotel Jackson" do not have to leave their suites to use the bathroom, reducing even further the number of communal areas on the floor as well as opportunities to pass each other area in the hallway or strike up spontaneous conversation:



You know, I've walked through places like [other dorm] and noticed a lot more doors that are kept open than in Jackson... I think people who live in the other dorms, I mean, to go to the bathroom they have to go down the hall... just because they have to [do that, they] bump into each other. But if you live in [this dorm] you can stay in your little room all night and never have to go outside... there are a lot of times I will be in my room all night and not see anyone just because I was busy. I mean, even if I have to get up and go to the bathroom, I don't pass anybody 'cause I don't have to go down the hall, you know. So even in the midst of... your busy life... the construction of the dorm can hamper the amount of people you bump into every day.

As noted earlier, there are cable jacks in every room, which insures good reception for students who bring their own television to school. Indeed, many residents did have their own television, and some also had VCR's. Not surprisingly, most students said they watch TV in their own rooms or the room of a friend more often than in the television lounge, where the cable is often missing. It is interesting to note that the television lounges were so quiet that several students said they use them to study or to just be alone.

In general, individual rooms were more inviting and comfortable than the communal areas on the floor. Students can watch television, visit with friends, study and use the bathroom without ever having to leave their suite. They can arrange their furniture to create a variety of environments, tailored to their individual taste and needs. By comparison, the public areas are more institutional in flavor, and the furniture is often broken or missing. Hallways are less than ideal for communication by students who depend on lipreading and sign language because they are poorly lit. The televisions frequently cannot be used, and there is usually a barrel of trash in the room. Even entry into the TV lounge is "formal" in that students must walk through a doorway and are literally entering a separate room; in comparison, students in other residence halls are more easily drawn into the lounges, since they are designed as natural extensions of the hallway and are not separated by a wall or doorway.

Not surprisingly, students tended to describe the floor as a quiet place, most appreciated by people who enjoy their privacy. Their comments reflect the opinion that Jackson is one of the nicest dorms on campus and a great place to live, but that it is not the best place for those who

want to meet people or have a great deal of interaction with others on their floor. One person summed it up as follows:

I love Jackson, but it's the suite thing, it makes you more isolated. It's more like a hotel... some of the people on my floor, it took them the longest time to even say "Hi" to us because we weren't sure if you lived there, [or] if you were just visiting.

Policies and rules related to student housing. There are rules which govern the placement and behavior of students within the residence halls. One important set of rules has to do with housing assignments. Most students agreed that placement of hearing and deaf students in the same room was rare, and several said that there was a policy against hearing-deaf combinations, a belief reinforced by the designation of rooms by Residence Life as "hearing" or "hearing-impaired." Their understanding of this policy varied widely. For _xample, while some raid that hearing-impaired and hearing students would not be placed together unless they specifically requested each other as roommates, one person said he knew of hearing-impaired and hearing friends whose request to room together was rejected because the hearing person had not taken sign language courses. Another student suggested that hearing-impaired/hearing roommates are only assigned when there is no other placement possible. All agreed that such placements were rare:

You can answer one question for me. I want to know why on a mainstream floor you can't have mainstreamed rooms. I mean, it doesn't make sense. I went over... this weekend to sign up for a room [for next year] and I saw they were color coded. For example, there was pink for hearing-impaired girls, blue for hearing boys, etcetera. Now why would they do that if it is a mainstream floor?

It's like rare [hearing-impaired and hearing roommates], it's like the last thing to do. If you cannot put a deaf guy and a deaf guy in a single room... [they ask themselves] "Can I put them in a single room, can I put them in a triple room? No, we can't do anything. Oh, shoot, we got to put them in a hearing room. OK, as... a last resort."

It was not possible to assess the impact of student's beliefs about the likelihood that they can room with a hearing (or, conversely, hearing-impaired) person on their motivation for and initiation

The Residence Hall Manual states that "the department [of Residence Life] does not assign hearing/hearing-impaired students to live together unless requested by both students." Designation of rooms as "hearing" or "hearing-impaired" is done to insure the safety of hearing-impaired students by placing them in rooms which have been equipped with strcbe lights, as well as for planning and student distribution purposes; the practice is not intended to discourage hearing and hearing-impaired students from rooming together.

of such an arrangement. However, it may be that students who believe that this combination is difficult or impossible to arrange may not even consider making such a request, even when they would like to have a hearing-impaired [or hearing] roommate. The fact that there are so few hearing-impaired and hearing roommates may reinforce the perspective that these situations are discouraged.

A second set of rules is related to student conduct in residence halls. While most students acknowledged that the rules which govern their behavior were for their own safety and security, they also noted that these rules limit opportunities for spontaneous interaction and camaraderie. For example, leaving one's doors open is described by students as symbolic of an openness to visitors. Several students believe that it is against the rules to prop open the heavy doors leading into bedrooms, and one student said he was "written up" for doing this. It is also cumbersome to prop the door open; a few students removed the part of the door which makes it close automatically, in defiance of safety and fire rules. Relatedly, most students said that parties must be private, that is, involving friends and invited guests only; "open parties" are forbidden. As a result, students tend to go only to parties of people they know, which in turn makes it more difficult for people to meet and get acquainted with people outside their immediate circle of friends. Changes in the drinking age law (21) have also influenced student interaction; many students drink illegally, which requires that they keep their doors closed and parties restricted to an inner circle of people who can be trusted.

Stability of the environment. As noted earlier, communication between hearing and hearingimpaired students improves over time. Not surprisingly, students who returned to a mainstream floor
for a second or third year tended to describe themselves as more comfortable and successful in
building relationships. Given this finding, the lack of stability within the residence hall is
troublesome. Almost everyone we spoke with had experienced some kind of instability in terms of
living arrangements, due either to their moving from one room or floor to another, or the move of a
roommate or suitemate. Some people had experienced three different living arrangements within the



past year. As one person put it, "Everyone keeps moving." The most frequent reason for changes in room assignments involved detripling and consolidation (the reassignment of students to relieve overcrowding and maintain balanced distribution throughout the residence halls). While close friendships were likely to withstand physical separation, casual and new acquaintanceships vere often damaged or lost. Since relationships between hearing and hearing-impaired students tended to be more difficult to establish and maintain, they were particularly susceptible to breakdown as a result of instability in room or floor placement. Some examples:

Hearing Student: Well, there was one girl on the seventh floor, we got to know each other pretty well, and the poly way we could communicate... was through note: We would like write pages and pages of notes, and she said "Well, I'll teach you sign language sometime." And, you know, because of my different moves and everything, you know, I see her once in a while in the elevator... but like we would never see each other in classes. And so... we have kind of lost touch.

Hearing-impaired Student: In the beginning of the year when I lived on the third floor I had two real good [hearing] friends across the hall. And now they're gone somewhere in the hearing area over there too. And I used to go to a lot of their parties, with hearing, and me and [friend] were like the only two deaf people there... It was pretty good, until I moved up here [to floor under study] and they moved away. Cause then, after that... [I go to] just mostly deaf parties.

Campus Culture and Organization

In order to comprehend what happens to hearing-impaired and hearing students within the campus environment of the residence hall, it is necessary to locate this experience within the larger context of campus organization, that is, the physical, educational and administrative environments of campus. Analysis of students' more general comments about interaction between deaf and hearing students on campus reveal a pervasive theme of separation between NTID and the organization of which it is a part.

At the most fundamental level, there is a physical congregation and segregation of many hearing-impaired students on compus, both for academic work and within the residence halls.

Jackson is part of a complex which includes three residence halls, a dining hall, and an academic



building⁶. These buildings were intended to be used primarily by students attending classes within the college of NTID. Although hearing students also live in the residence halls in this complex, they are in the minority. As a result, students said that the JLC/Stryker complex has become synonymous with hearing-impaired students. As one person put it, "there are other mainstream floors in other dorms, but when you think "deaf people, you think of the JLC quad and the NTID building."

Students told us that the physical separation of hearing-impaired students is a barrier to interaction. For example, some hearing students are unwilling to enter a part of campus which they perceive as hearing-impaired students' territory:

The people that are in the other residence halls are afraid to come into our... area. They're afraid... they're going to go into another country, another world, which may be true but they don't even want to try... Most people don't think that any hearing students live there at all.

Conversely, the layout of campus restricts the movement of many hearing-impaired students in that those who attend classes within the college of NITD can complete much of their daily business on campus without interacting with hearing students or leaving the JLC/Stryker complex. The following quotations are illustrative:

Most of the time I meet more deaf people because of the classes... NTID class only has deaf students, so I meet them more than I meet hearing people. So that's why I socialize more with the deaf people than with the hearing people.

I think it was a big mistake to build the campus the way it is. Have you heard the term "deaf ghetto?" Deaf students... wake up in the morning, they go to breakfast, they go to their class, they go back into their room, they go to lunch, they go to class, they go back in their room, they go to dinner, they go back into their room. They're trapped in this little square....[Later, same interview] If the academic buildings were on the other side of campus... everybody would have a chance to interact with deaf people...

Even hearing-impaired students who are registered in courses within the other eight colleges of RIT are not guaranteed a truly integrated class experience. For example, sections of some of these courses are designated NTID Supported, NTID students only, or NTID Section, which means that

⁶ The three residence halls and the dining hall are called the JLC complex. The academic building is called the NTID or Stryker building. The buildings are set around a small courtyard, which has resulted in references to the entire complex as a "quad."

interpreters and notetakers are automatically scheduled for the section, or the section is taught by NTID faculty. In either case, hearing-impaired students enrolled in these courses are likely to be congregated within the designated sections. While placement in these section significantly increases the academic success of many hearing-impaired students, it also reinforces the them of separation on campus. In the following quotation, a hearing-impaired student expresses his concern about this practice:

On campus, I would like to have more mainstreamed class[es]. So the deaf RIT students know they're getting an equal education as the hearing. Because when I go over there [RIT], some of the classes are really ridiculous... I'm 99% RIT, 1% NTID on math. And [when]... you're in all deaf Liberal Arts courses, you're [thinking] like, "What is this? This is an RIT course that is all deaf? I do not like this."

The physical and educational congregation and separation of deaf students is compounded by a wide range of administrative practices, many of which involve the use of language within campus publications. For example, one student pointed out that campus maps designate certain buildings as NTID, which sets them apart from RIT:

A lot of people... don't even know that... the dining hall here [in the JLC complex] is open to anybody... they think it's just for deaf students cause, in fact, on all the information that RIT publishes, they have the pice little map of the campus, but they specifically say, like, "Smithson Dining Commons... Residence Dining Hall," and then they say "Runnell Dining Commons-NTID Student's Residence Dining Hall." There's some very strong barriers between RIT and NTID.

We checked the map and found that the student is correct. We also noticed that the residence halls in the JLC complex are designated as "NTID Residence Halls" on the map, even though hearing students and students enrolled in the other eight colleges of RIT also live in these buildings. The same student continues:

Every time you go into ... Student Health, you have to [indicate if you are RIT or NTID]... it doesn't say "Are you hearing-impaired?" It says RIT [or] NTID... I don't know what they mean by that, maybe there's funding or something. Every form you fill out it's either RIT or NTID... Which is a strong... line right there...

Not surprisingly, the physical, educational and administrative separation of deaf and hearing students has resulted in a conceptual distinction between NTID and RIT in the minds of many students. For example, one student said that the woman down the hall attends "two schools."



When asked what school this woman goes to in addition to RIT, he responded, "Well, she goes to NTID and RIT." Another student noted that "you're either NTID or you're RIT according to a lot of people; you're not NTID, another college of RIT." Similarly, when students talk about deaf students who are enrolled in courses within the other colleges of RIT, they use phrases like "crossing over to RIT," and "going to school on the other side." These phrases have both a physical and conceptual meaning. Hearing-impaired students who have been attending classes in the Stryker building must certainly see themselves as physically crossing the campus when they atterd classes in other colleges. Conceptually, students are crossing from the self-contained program of NTID into the mainstream programs of the other colleges of RIT. The notion of "crossing over" is no doubt supported by the administrative term "Cross-Registered Student," which is used in RIT publications to refer to hearing-impaired RIT students who are majoring in a program within one of the other colleges of RIT, or majoring in a program within the college of NTID but registered for a course within one of the other colleges. As one student noted, "NTID [academic building] should have been on the other side... because... you feel it's not part of the college..."

The distinction in the minds of students between NTID and RIT has several unfortunate corollaries, one of which involves negative stereotypes of hearing-impaired students and NTID. Perhaps the most striking negative stereotype of deaf RIT students is the reference to these students as "NIDS." Several students speculated on the origins of this term, usually indicating that it must be an abbreviation or derogatory alteration of NTID, such as "National Technical Institute for the Dumb". Others suggested it had no specific meaning—that it was just some sort of code for NTID, while a few thought it might be a deliberate misspelling of NTID. Most students agreed that NIDS is a negative term, not unlike the term "nigger" in reference to black people. Definitions include "childish," "nerd," "immature," "crazy," "animal," "stupid," "inferior," "totally c posite," "baby" and "snob". The following are examples of usage:

... you know its just that in the [name of fraternity] we told you that they were yelling "Death to the NIDS" out their window last year.

... one morning I walked out and on the elevator in the elevator lobby on the wall they had "You stupid NIDS" and a couple of swear words....

I know that my roommate that I have right now, she's not coming back to this dorm because of the hearing impaired. ...I saked her where she was going to be living, and she said she was living in [other residence hall]... [I asked her] "You're not coming back here?" [And she replied] "Oh no, I can't stand living with NIDS".

A second negative stereotype involves the perception by some students (both deaf and hearing) of NTID as academically less rigorous than the other colleges of RIT. In this vein, one person said that NTID is considered by some students to be a "glorified high school for deaf people." In the following quotation, a "cross-registered" hearing-impaired student describes the reaction of his hearing-impaired friends to his academic status:

Some hearing look down on deaf and some deaf look up to hearing. They, deaf, ask me "Are you NTID or RIT?" I say, "RIT." They say, "Wow, how do you do it? It's so hard." I explain, "No, it's not really, just the communication sometimes. Sometimes new vocabulary that I've never heard, but it's not really hard if you really study." They look up to me and to hearing [people] for that.

A third sterectype is the belief of many hearing students that hearing-impaired students are spoiled by the government. Benefits which hearing students find most irritating include government supported tuition, Supplemental Security Income (SSI), and the fact that the buildings within the JLC/Stryker complex are some of the most well appointed on campus. As the following quotation illustrates, hearing-impaired students are aware of these resentments:

... [in class] they're talkin' about issues between hearing and deaf, and he told us hearing people call us "NIDS." And I was like, "Well, I don't like that." That pissed me off. But I understand the reasons. We deaf, we get all the government support, like I do right now. Without that, I wouldn't be here.... And these hearing people, they get to pay a lot of money to be here... and then when they hear that we have it easy, and that we have everything for free in a sense, that pisses them off. That's why I don't talk about money in front of them, cause I realize in a sense I'm lucky.

Despite efforts to minimize the visibility of differences in funding levels and government support, hearing students are generally aware of these differences. The pervasiveness of this theme is reflected in a joke which was shared by a student in the course of an interview. The joke, which had been published in the magazine Distorter (an annual spoof edition of the campus Reporter newspaper), goes as follows:



Q: How many NIDS does it take to sevew in a light bulb?

A: None, the government does it for them.

In summary, the RIT campus is currently organized and administered in such a way as to promote a deep separation between NTID and RIT. The physical layout of the campus, in combination with educational and administrative practices, creates and perpetuates in the minds of many students (and quite probably faculty and staff) the idea that one is either NTID or RIT. The study of interaction between hearing-impaired and hearing students within any campus setting must be undertaken with this cultural framework in mind.

Discussion

Interaction between students within the RIT residence halls is a complex phenomenon. In order to explain it, one must understand the range of factors which influence interaction, including individual as well as environmental factors. The factors we describe are interactive; that is, while we isolated them for the purpose of discussion, they cannot be fully understood except in relation to each other. An ecological model of human behavior can be used to illustrate and discuss the interactive nature of these findings (Bronfenbrenner, 1979). Briefly, this model is grounded in the idea that in order to understand or explain the behavior of the individual, one must percieve that individual as existing within larger institutions and social systems, each of which interacts with and therefore influences (and is influenced by) the individual and the other systems. This "nesting," or location of the individual within one or more social systems and institutions is perhaps best conceptualized as a series of concentric circles, with the individual represented at the center of the circle(s). Systems can also overlap, in which case the representation would include two or more sets of concentric circles which intersect or touch at some point.

In order to explain the behaviors and experiences of the students in this study, it is necessary to both describe the individual and to locate the individual within the range of social, political, and cultural systems operating on the RIT campus. For example, students bring with them a host of attitudes, skills, beliefs, assumptions and expectations. Whenever they come into contact with another person, they interpret and analyze their experience in light of these highly individual

characteristics. However, they also live within social groupings or cliques which are embedded within the larger social system of the residence hall, which is located within a particular section, or block of residence halls, which is in turn part of the larger social system of campus life, which is embedded in the culture and values of the general RIT community. Of course, this is an oversimplification of a complex situation; in order to completely capture the experience of the students in our study, several sets of overlapping systems are required. Moreover, such a representation would need to incorporate the notion of constant change, since the individual system(s) both shape and are shaped through interaction. The following examples illustrate the complex relationship between the RIT student and the various campus systems of which he or she is a part:

- > Drinking is not permitted in the dorms; as a result, students who choose to drink in their rooms close their doors to prevent being apprehended, which also makes them less accessible to drop ins and spontaneous interaction with people other than invited guests.
- > New hearing students note that some upperclassmen call hearing-impaired students "NIDS." When they ask for an explanation, they are told that hearing-impaired students are childish, spoiled by the government, and/or that NTID is little more than a "glorified high school." This in turn influences their appraisal of the hearing-impaired students on their floor and subsequent interpretation of events in the residence hall.
- > The residence halls in the JLC/Stryker complex are in some ways more like a hotel than a dormitory. Not surprisingly, students who elect to live there or return for a second year are often those who enjoy their privacy and may therefore be less likely to want or seek interations with others who live on their floor.



> Hearing-impaired students who have experienced painful experiences in interactions with hearing people prior to arrival at college may be disinclined to interact with hearing students in their residence hall. The hearing residents may, in turn, interpret this behavior as arrogance and/or intolerance.

This ecological model of human behavior is not limited to the RIT residential system or postsecondary educational settings. Studies of interactions between hearing and hearing-impaired people in the community, elementary and secondary schools, work place, and within family settings may also be analyzed using this approach. Some examples:

- > A hearing person who supervises a hearing-imp aired employee comments that the employee "is a loner, prefers to keep to himself," in explaining why the employee always reads the newspaper or goes out alone at lunch. Observation and conversations with hearing co-workers and the hearing-impaired employee reveal that, while hearing co-workers are willing to take the time to repeat or write down information related to job tasks, they are less willing to do this when the conversation is informal or purely social. As a result, the hearing-impaired employee is socially isolated and has no close relationships with co-workers. While the hearing-impaired employee's decision to spend time alone at lunch is indisputable, it cannot be assumed that this is his preference.
- > Hearing parents do not sign to their hearing-impaired son, based on information presented to them by educational specialists. Over time, the son spends more and more time with hearing-impaired peers, eventually expressing a preference for his life at a residential school for the deaf over time spent at home during holidays.



> A hearing-impaired high school student complains that the support services provided by the school are inadequate to allow her full and informed participation in class. Observations in the class reveal that the teacher uses informal group discussion as a primary teaching strategy and evaluation tool; however, the arrangement of desks in traditional rows, combined with a failure to enforce turn taking strategies and pacing of the conversation, has made it almost impossible for the student to join the discussion. Moreover, the school administrators, having provided the interpreter, believe themselves to be in full compliance regarding educational access, and tend to interpret the student's complaints as picky and overly demanding.

The ecological model suggests that intervention plans must consider the influence of all systems on the individual as well as the ways in which the behavior of the individual influences the system; within such a framework, changes in physical, social, or political systems may hold promise of equal or even greater effectiveness than interventions designed to modify the behavior and perspectives of the individual. This is in contrast to more traditional intervention models, in which primary efforts at change are generally focused solely on the individual. Thus, in the case of the mainstream residence hall, modifications of the physical setting and alterations of maps and administrative practices which separate hearing and hearing-impaired students may be as effective in promoting interaction as floor programs, informational brochures, courses and other strategies aimed more directly at students.

Application of the ecological model requires that attention be paid to the unintended as well as intended consequences of policy and action. In fact, many of the barriers to interaction between hearing and hearing-impaired students described in this paper are the result of unintended consequences. For example, the practice of asking students to identify themselves as "NTID" or "RIT" on health service forms is intended to help with utilization review; the conceptual separation of hearing and hearing-impaired students is an unintended consequence. Conversely, changes which are made with the intention of improving interaction between hearing and hearing-impaired students



on the RIT campus must be analyzed for unintended consequences. Many hearing-impaired students prefer separate classes and a quasi-congregate residential facility such as the JLC/Stryker complex b-cause of the improved communication and sense of community which they experience in these settings. Requiring hearing-impaired students to take all classes with hearing students or scattering them involuntarily in residence halls throughout the campus, while achieving the goal of physical mainstreaming, would most likely have several negative unintended consequences, the most obvious of which would be the disruption, if not destruction of the RIT hearing-impaired student community. Interventions which are developed as a result of this study will have unintended effects which should be understood and and matched to student goals before implementation. In each case, the goal should be the creation of a campus where all services, settings, and activities are fully accessible to all students, and decisions about when and how to participate made by students from a position of choice and equal opportunity.

Recommendations for Future Research

We learned from conversations with returning students that, even within the mainstreamed residence halls, every floor is different and each has it's own "personality." For example, the hearing-impaired students we met were very "oral," and many had attended mainstreamed high schools. Several students said that other floors are more "lively." Students who had lived in Jackson for several years recalled past experiences as better in some ways, and worse in others. Further, other hearing and hearing-impaired students live in primarily separate housing or off campus. Additional research of other mainstream floors and residential options should be done, in order to expand on the current set of findings and develop a more complete picture of residence life for all RIT students.

As noted in the Introduction to this report, one of the reasons for the commission of this study was the concern that social interaction between hearing-impaired and hearing students on deliberately mainstreamed floors was not occurring as much as might be hoped. As a result, we have focused much of our report on describing barriers to interaction, with the idea that once these

barriers are identified we can begin the task of overcoming them or at least minimizing their effect. However, this report also includes descriptions of positive interactions and friendships between hearing-impaired and hearing students. Further research should be done to document in greater detail those conditions which engender as well as sustain close, positive relationships between hearing-impaired and hearing students on the RIT campus.

Finally, we would note that in studying interaction between hearing and hearing-impaired students in mainstream residence halls, we are painting only a very small piece of the larger picture of campus life at RIT. Hearing-impaired students also have social and academic clubs, government groups, and fraternal organizations within which the membership is predominantly hearing-impaired and the goal of interaction between hearing and hearing-impaired students replaced by self-advocacy, shared experience, and participation in Deaf⁷ culture and community. Studies of these settings would no doubt yield a very different perspective on life at RIT. We encourage research in these areas, and suggest that the best kind of campus for all students is one in which diversity is valued, and opportunities for involvement in a range of activities made possible.



⁷ The use of the uppercase "Deaf" is used to refer to "a particular group of deaf people who share a language--American Sign Language (ASL) and a culture," as opposed to the lowercase "deaf" which refers "to the audiological condition of not hearing" (Padden and Humphries, 1988).

Diagram 1
Configuration of Rooms and Student Distribution





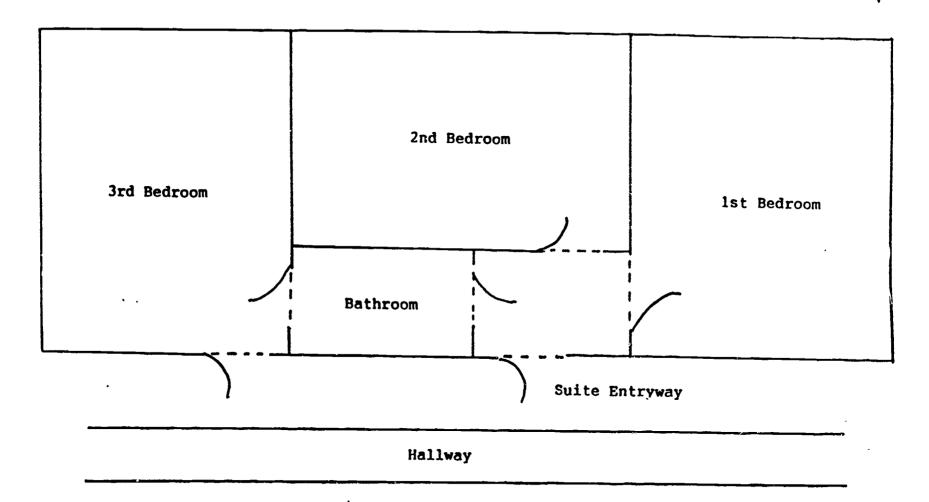


Diagram 2

Layout of Suites

References

- Bogdan, R. and Biklen, S.K. (1982) Qualitative research for education: an introduction to theory and methods, Boston: Allyn and Bacon.
- Bogdan, R. and Taylor, S. (1975) Introduction to qualitative research methods: a phenomenological approach to the social sciences, New York: Wiley.
- Bronfenbranner, U. (1979) The ecology of human development: experiments by nature and design, Cambridge, MA: Harvard University Press.
- Farrugia, D. and Austin, G. (1980) A study of social emotional adjustment patterns of hearingimpaired students in different educational settings, *American Annals of the Deaf*, 125 (5), pp. 585-541.
- Foster, S. (1989) Reflections of deaf adults on their experiences in residential and mainstream school programs, *Disability, Handicap and Society*, 4 (1), pp. 37-56.
- Foster, S. (1988) Life in the mainstream: reflections of deaf college freshmen on their experiences in the mainstreamed high school, *Journal of Rehabilitation of the Deaf*, 21 (1), pp. 1-15.
- Garrestson, M. (1977) The residential school, The Deaf American, 29, pp. 19-22.
- Mertens, D. and Kluwin, T. (1986) Academic and social interaction for hearing-impaired high school students, Paper presented at the 1986 meeting of the American Educational Research Association, San Francisco, CA.
- Sarason, S. (1972) The Creation of settings and the future societies, San Francisco: Jossey-Bass.
- Spradley, J.P. (1979) The Ethnographic interview, New York: Holt, Rinehart and Winston.

